[0071] The database **1625** may maintain information related asset management and tracking, and the home network server computer(h) **1503** processes instructions and data to operate the enterprise asset management and tracking software for the system. The invention contemplates centrally located computer servers to operate the software modules and database information on the network, but remotely located servers and computer networks can also be accessed and used with the invention.

[0072] The home agent **1505** on the home network **1501** is coupled to a gateway **1507** by line **1504**, and the gateway **1507** facilitates communicates to and from the home network **1501**. The gateway **1507** is coupled to a basestation transceiver BTSh **1655** via line **1656**, which is coupled to a radio transmission unit and antenna **1665** via line **1667**. That radio transmission unit and antenna **1665** facilitates communications to other radio transmission units **1670**. The transmission unit **1665** supports radio transmission communications links (e.g. Wi-Fi, cellular, GSM, Evdo, 4G/LTE, CDMA, or others), to other networks and communication units.

[0073] The gateway **1507** is also coupled via line **1610** to hardwire communication line **1615**, computer server(c) **1620** via line **1617**, and the Internet **1630** via line **1635**. The home network processes communications to and from said mobile foreign network, and information related to the external devices and radio tags (e.g. location, proximity, status) can be included in communications to the home network. The home network can communicate via wireless transmission or a wired communication link to the mobile node, the Internet, other computer servers or other foreign or associated home networks.

[0074] As also shown in FIG. **15**, radio transmission RFID tags **1575**, **1570** and **1560** are electronically coupled to RFID readers **1540**, **1550** and **1555**, respectively. RFID readers **1540**, **1550** and **1555** are coupled to the controller unit CU **1510** via line **1535**, which is coupled to computer server(f) **1530** via line **1523**, pad/laptop **1520** via line **1524**, and foreign network gateway **1515** via line **1517**.

[0075] The controller unit CU **1510**, computer server(f) **1530**, pad/laptop **1520**, and foreign network gateway **1515** are coupled to the Internet **1630** via lines **1625** and **1521**, lines **1625** and **1522**, lines **1625** and **1519**, and lines **1625** and **1521** respectively. The controller unit CU **1510**, computer server(f) **1530**, pad/laptop **1520**, and foreign network gateway **1515** are coupled to the computer server(c) **1620** via lines **1621** and **1521**, lines **1621** and **1522**, lines **1621** and **1519**, and lines **1621** and **1521** respectively. The controller unit CU **1510**, computer server(f) **1530**, pad/laptop **1520**, and foreign network gateway **1515** are coupled to the home network **1501** by a hardwire communication link via lines **1610**, **1615**, and **1521**; lines **1610**, **1615**, and **1522**; lines **1610**, **1615**, and **1519**; and lines **1610**, **1615**, and **1521**, respectively. And, controller unit CU **1510**, computer server (f) **1530**, pad/laptop **1520**, and foreign network gateway **1515** are coupled to the basestation transceiver unit (coupled to transmission unit and antenna **1670**) via lines **1685** and **1521**, lines **1685** and **1522**, lines **1685** and **1519**, and lines **1685** and **1521** respectively.

[0076] The above-described embodiments of the present application are intended to be examples only. Those of skill in the art may effect alterations, modifications and variations to the particular embodiments without departing from the scope of the application. In the foregoing description, numerous details are set forth to provide an understanding of the present invention. However, it will be understood by those skilled in the art that the present invention may be practiced without these details. While the invention has been disclosed with respect to a limited number of embodiments, those skilled in the art will appreciate numerous modifications and variations therefrom. It is intended that the appended claims cover such modifications and variations as fall within the true spirit and scope of the invention.

We claim:

1. A communication system supporting processing of communications regarding tracking, location and status of field assets, comprising:

a first computer server on a home network, said first computer server having processors with functionality to receive and process tracking, location and status information signals relating to field assets, said first computer server coupled to a home agent and a first gateway server for communication outside the home network;

a second computer server on a foreign network, said second computer server being coupled to a controller unit, said controller unit being coupled to a second gateway server for communication outside the foreign network and said controller unit being coupled to one or more antennas that receive radio transmitted signals from radio tags, each of said radio tags being associated with a field asset and said controller unit using said radio transmitted signals received by the antennas to produce tracking, location and status information signals that are communicated to the first computer server on the home network,

said controller unit having functional capabilities that include a data collection engine that controls and supports scanning operations and collection of data by and through the controller unit, a data communication engine that controls and supports communication and data transmission operations by and through the controller unit; a smartpower engine that manages power consumption of the controller unit, identifies low battery power status, and transitions the controller unit to sleep mode to avoid battery drain, an radio reader and multiplexer module that receives and manages the communications with multiple radio signals using a multiplexed antenna configuration, a geolocation and tracking engine that controls and supports geolocation, tracking, and status of the controller unit, radio tags, and field assets associated with radio tags, an interface engine that supports two way communications between the controller unit and external devices, a vehicle bus engine manages interactions between the controller unit and a vehicle; a controller device management engine that supports and manages operational support components associated with the controller unit; and, an operations engine that supports and manages component service engines and modules in the controller unit.

2. The communication system according to claim **1** further comprising:

a communication link between the home and foreign network supported over the Internet.

3. The communication system according to claim **1** further comprising: